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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/590,509	06/12/2007	Carsten Gunther	47279-5004	1021
	7590	EXAMINER		
1500 K STREE		FRIDIE JR, WILLMON		
SUITE 1100 WASHINGTON, DC 20005-1209			ART UNIT	PAPER NUMBER
			3724	
			MAIL DATE	DELIVERY MODE
			05/12/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
Office Action Summers	10/590,509	GUNTHER ET AL.				
Office Action Summary	Examiner	Art Unit				
	Willmon Fridie	3724				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on 17 Fe	hruary 2009					
<i>i</i> —	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
closed in accordance with the practice under Ex parte Quayle, 1999 O.B. 11, 400 O.G. 210.						
Disposition of Claims						
4) Claim(s) <u>1-19</u> is/are pending in the application.	☑ Claim(s) <u>1-19</u> is/are pending in the application.					
4a) Of the above claim(s) is/are withdraw	4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-19</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or						
Application Papers						
9)☐ The specification is objected to by the Examiner.						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) All b) Some * c) None of:						
·— <u> </u>						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
	·					
Attachment(s)						
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da					
3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date  5) Notice of Informal Patent Application 6) Other:						
	· <del></del>					

## **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flynn (6435780).

Flynn (6435780) discloses a tool for cutting materials comprising a rotatable body with a rotation axis and cutting edges for cutting the material during movement of the body in a first direction parallel to the rotation axis; the cutting edges (20, 22, 24) comprise inner cutting edges (30, 32, 34) laying on a first surface of revolution which is in the first direction higher at a larger diameter and lower at a smaller diameter. Also an outer edge forming a cutting tooth (18) is disclosed.

Flynn (6435780) discloses the claimed invention except for a cone angle larger than 65°. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a cone angle larger than 65°, since it has been held that discovering an optimum

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value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

In regard to claims 6 and 7 it would have been an obvious matter of design choice to use the claimed dimensions since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955).

It appears that there would be no new or unexpected result from such a modification.

In regard to claims 7, 9 and 11, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the claimed ranges since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

In regard to claims 14 and 16, it would have been obvious to one having ordinary skill in the art at the time the invention was made to locate the elements in the claimed manner since it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70. It appears that there would be no new or unexpected result from such a modification. With respect to claim15, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the claimed number of elements since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. St. Regis Paper Co. v. Bemis Co., 193 USPQ 8. It appears that there would be no new or unexpected result from such a modification.

With respect to claims 18 and 19, to perform the method as claimed would have been obvious to one of ordinary skill in the art, in view of the teachings of Flynn (6435780), since all the claimed

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elements were known in the prior art and one skilled in the art could have combined the elements as claimed and use them in an off the shelf method known to those in the industry with no change in their respective functions, such that the claimed method steps would perform their known functions and the combination of steps would have yielded nothing more than predictable results to one of ordinary skill in the art at the time of the invention.

## Response to Arguments

Applicant's arguments with respect to claims 1-19 have been considered but are moot in view of the new ground(s) of rejection.

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Willmon Fridie whose telephone number is 571 272 4476. The examiner can normally be reached on Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ASHLEY BOYER can be reached on 571 272 4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

wf

/Willmon Fridie/ Primary Examiner, Art Unit 3724